



THE UNITED STATES PATENT AND TRADEMARK OFFICE

United States Patent Application

To: Commissioner for Patents
Washington, D. C. 20231

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CERTIFICATION UNDER 37 C.F.R. 1.8
I hereby certify that this document, along with attachments referred to or identified as being enclosed, is being deposited with the United States Postal Service with sufficient postage as first class mail on 09 July 2001 in an envelope addressed to Commissioner for Patents, Washington, D. C. 20231. Name of Registered Representative: James L. Sonntag, Reg. 30224

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Application Number..... 09/636157
Confirmation Number..... 6508
Filing Date 08-Aug-2000
Applicant(s)..... Anil Vasudeo Virkar,
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Group Art Unit..... 1755
Examiner Michael Marcheschi
Attorney's Docket Number..... MS2034-1
Title "ALKALI-METAL-BETA- AND
BETA"-ALUMINA AND GALLATE
POLYCRYSTALLINE CERAMICS AND
FABRICATION BY A VAPOR PHASE
METHOD"

PRELIMINARY AMENDMENT

Please amend the application as indicated below:

In the Claims

Please cancel claim 1 without prejudice.

Please add the enclosed new claims.

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TC 1700

12 42. A process for forming ceramic composites of an oxygen-ion conducting ceramic and an alkali-metal-ion conducting ceramic; forming a shaped composite comprising a precursor ceramic of alpha-X₂O₃ and oxygen-ion conducting ceramic, such that a continuous matrix exists in the composite for both the precursor ceramic and the oxygen-ion conducting ceramic, subjecting the composite to a vapor containing metal oxide of an alkali metal at sufficient temperature and for sufficient time to convert precursor ceramic into a continuous phase of

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01 FC:203 198.00 OP
02 FC:202 360.00 OP
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